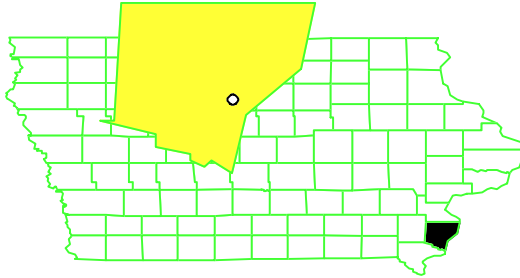


**IOWA ARMY  
AMMUNITION PLANT  
IOWA  
EPA ID# IA7213820445**

**EPA Region 7  
City:  
County: Des Moines County  
10 miles west of Burlington  
Other Names:**



## **SITE DESCRIPTION**

The 19,127-acre Iowa Army Ammunition Plant (IAAP) site's primary activity since 1941 has been to load, assemble, and pack a variety of conventional ammunition and fusing systems. The Atomic Energy Commission (AEC) operated at Line 1 of the IAAP from 1948 to 1975, assembling nuclear weapons. Wastes currently produced at IAAP consist of various explosive-laden sludges, wastewaters, and solids, lead-contaminated sludges, ashes from incineration and open burning of explosives, and waste solvents from industrial and laboratory operations. Past operations also generated waste pesticides, radioactive wastes, and incendiaries. The Army has identified a number of potentially contaminated areas, including an abandoned 4-acre settling lagoon, the Line 800 Pinkwater Lagoon, which received wastewater containing explosives from 1943 to 1955. The lagoon held approximately 75,000 cubic yards of explosive contaminated soils. A second area of concern was the former Line 1 impoundment, which was used from 1948 to 1957. Wastewater flowed through the 3 acre sedimentation area, where explosives settled out. Wastewaters subsequently overflowed the dam into Brush Creek. Approximately 100 people live within 3 miles of the site and obtain drinking water from private wells. In the spring of 1993, the Army analyzed water samples from the wells of residences located just south of the IAAP. Two of the wells were found to contain explosives at levels exceeding health advisory limits. The Army offered alternate water supplies to all potentially impacted residents south of the IAAP and provided connections for all residents who so desired. Surface water within 3 miles downstream of the site is used for recreational activities.

### **Site Responsibility:**

This site is being addressed by the Army with oversight by the EPA.

### **NPL LISTING HISTORY**

**Proposed Date:** 07/14/89

**Final Date:** 08/30/90

Deleted Date:

## THREATS AND CONTAMINANTS

The Army conducted tests from 1981 to 1984 and detected explosives, from former waste disposal practices, in surface water and groundwater monitoring wells downgradient of the lagoon and dam. In 1984, the Army detected explosives and lead in creek sediments. People using Brush Creek for recreational purposes may be at risk due to contaminated waters and sediments. Two individuals living south of the IAAP along Brush Creek were placed on bottled water by the Army in the spring of 1993 due to the presence of explosives at levels exceeding health advisory limits in their water supply wells. The Army has connected approximately 150 residences south of the IAAP to an alternate water supply due to actual and potential contamination of groundwater with explosives. Investigation to define the nature and extent of groundwater contamination off-post are continuing.

## CLEANUP APPROACH

### Response Action Status

Interim Actions: In the summer of 1995, the Army completed interim cleanup actions to address soil contamination at a former pesticide disposal pit and at numerous explosive-wastewater sump locations. An additional interim action was initiated in the spring of 1996, in which approximately 83,000 cubic yards of explosives-contaminated soils and sediments from the former Line 1 Impoundment Area and the Line 800 Pinkwater Lagoon were excavated and disposed of on-site. Soils were segregated and disposed of according to their levels of risk. The most highly contaminated material was temporarily stockpiled for eventual treatment while potential treatment processes are evaluated. Mid-level waste materials have been permanently disposed on-site in a lined soil repository that has been built adjacent to the installation's former Inert Disposal Landfill. The excavation of contaminated soils from the Line 1 and Line 800 areas was completed in the summer of 1997. The excavated areas at Lines 1 and 800 have been transformed into wetland areas, where phyto-treatment alternatives for explosive-contaminated groundwater will be evaluated. If the treatment studies are successful, the Army may evaluate expanding this concept to a site-wide groundwater remedy. The Army, in the spring of 1998, began implementation of a cleanup approach similar to that used at Line 1 and 800 at over 200 other individual source areas at the IAAP as an Interim Remedial Action (IRA). A Record of Decision (ROD) for this action was signed in late March 1998. A cleanup of solvent and fuel contaminated soils from past operation at the Fire Training Pit was completed in mid-1999.

Entire Site: In 1990, the Army began a study to determine the nature and extent of contamination

at the site and identified 43 individual areas requiring investigation. With the assistance of the EPA, samples were collected from these potential areas of contamination. After analyzing these samples, the EPA and the Army determined that approximately three-quarters of the areas needed further investigation. A site-wide investigation was completed in 1994. The Army completed a supplemental field effort in the spring of 1997 to better define the extent of contamination. Significant contaminant volumes from the former Line 1 Impoundment Area and the Line 800 Pinkwater Lagoon have been addressed through early response actions. Offsite groundwater sampling in the summer of 1999 has indicated the presence of low levels of explosives in groundwater near Brush Creek. This issue is currently under evaluation. Additional investigation of past AEC operations at the plant, especially at Line 1 and the Firing Site are being planned with input from the Department of Energy. Chunks of depleted uranium were reported at the Firing Site in the Fall of 2000, prompting increased focus on this site.

**Site Facts:** A Federal Facilities Compliance Agreement between the Army and the EPA was signed in 1988. The installation subsequently was proposed for the National Priorities List (NPL), and Federal Facility Agreement was negotiated in late 1990. The IAAP site is participating in the Installation Restoration Program, a specially funded program established by the Department of Defense (DoD) in 1978 to identify, investigate, and control the migration of hazardous contaminants at military and other DoD facilities.

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## ENVIRONMENTAL PROGRESS



The interim actions completed in 1997 at the IAAP site reduce the potential threats to people and the environment while further cleanup actions are being planned.

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## SITE REPOSITORY



Main Administration Building, Iowa  
Army Ammunition Plant, Middletown,  
IA 52638  
Danville Iowa City Hall, Danville, IA  
Burlington Public Library, Burlington,  
IA

Superfund Records Center  
901 N. 5th St.  
Kansas City, KS 66101  
Mail Stop SUPR  
(913)551-4038

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## REGIONAL CONTACTS

**SITE MANAGER:**

**E-MAIL ADDRESS:**

Scott Marquess

marquess.scott@epa.gov

(913) 551-7131

**COMMUNITY INVOLVEMENT**

**COORDINATOR:**

**PHONE NUMBER:**

**PUBLIC INFORMATION CENTER:**

**E-MAIL ADDRESS:**

**STATE CONTACT:**

**PHONE NUMBER:**

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## MISCELLANEOUS INFORMATION

**STATE:**

IA

**CONGRESSIONAL DISTRICT:**

03

**EPA ORGANIZATION:**

SFD-SUPR/FFSE

## MODIFICATIONS